

No new matter has been added by these changes.

The drawings were objected to under 37 CFR 1.83(a). The Applicant directs the Examiner's attention to the claims, as amended, and respectfully requests that the Examiner withdraw this objection.

Claims 1, and 6-8 were rejected as being unpatentable over Trull et al. In addition, Claim 6 was rejected under 35 U.S.C. 112. Claim 2 was rejected as being unpatentable over Trull et al., in view of Akaike et al. Claim 3 was rejected as being unpatentable over Trull et al., in view of Ito. Claims 4 and 5 were objected to under 37 CFR 175(c) as being in improper form, and as unpatentable over Trull et al., in view of Ito and Akaike et al..

Applicant believes that amended Claims 1, 3, 6 and 8, Claims 2, 7 and new Claims 9-10 have sufficient antecedent basis for all terms used therein, and that they particularly point out and distinctly claim the subject matter of the invention. As shown below, amended Claims 1, 3, 6 and 8, Claims 2, 7 and new Claims 9-10 are not anticipated, taught, or suggested by any of the cited references.

Trull et al. was cited as disclosing a syringe gasket wherein a peripheral side surface of the gasket is in contact with an inner surface of the syringe barrel, wherein a restriction is provided and a periphery of a bottom surface of the gasket that is not in contact with the liquid is formed into a tapered slant. The Examiner has acknowledged that the Trull et al. device differs from the claimed invention in that there is no disclosure of the material of the gasket being laminated. Nor does Trull et al. teach a syringe gasket having a restriction that is adjacent to a tapered slant. Akaike et al. was cited as disclosing that a JIS hardness between 20 and 85 is optimal for syringe gaskets. Accordingly, it is respectfully submitted that the invention

of the instant application is patentably distinct over Trull et al. alone or in combination with Akaike et al..

Ito was cited as disclosing that a syringe gasket may be laminated with a polyethylen resin as a lubricant and protective coating. Ito discloses a coating layer formed on the surface of the metallic plunger of a microsyringe to protect the plunger from breaking when inserted into the syringe body. It is respectfully submitted that the technical field and purpose of Ito differ from that of the claimed invention and that of the Trull et al. device. In Ito, the syringe contents are injected into an analytical apparatus for use in gas or liquid chromatography. Ito addresses none of the problems of using a syringe charged with a liquid that will be injected into a human body, including, without limitation, leakage of the liquid due to the heat and pressure of sterilization. Nor does Ito teach that a laminate may be applied to a syringe gasket having a restriction or tapered slants. Thus, the Applicant's invention is patentably distinct from Ito's syringe for the specialized application of gas and liquid chromatography. Further, the Examiner has shown no motivation to combine Ito with the Trull et al. disclosure. Accordingly, Applicant respectfully submits that amended Claims 1, 3, 6 and 8, dependent Claims 2 and 7 and new Claims 9 and 10 are patentable over Ito and Trull et al..

In view of the foregoing, Applicant believes that the application is in condition for allowance and such action is respectfully requested. If the Examiner believes that a discussion with the applicants' attorney would advance the prosecution of this application, or if the Examiner's action is other than allowance, the Examiner is invited to contact the undersigned at the number given below.

Respectfully submitted,

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Leslie M. Spencer
Reg. No. 47,105
WILLKIE FARR & GALLAGHER
787 Seventh Avenue
New York, NY 10019
212-728-8782 (phone)
212-728-9782 (fax)

APPENDIX A

CLAIM AMENDMENTS

1. (twice amended) A gasket for a pre-filled syringe into which liquid is charged, wherein a peripheral side surface of the gasket that is in contact with an inner surface of the syringe barrel is provided with a restriction, [and] wherein a periphery of a bottom surface of the gasket that is not in contact with the liquid is formed into a tapered slant, [the tapered slant being defined by a first diameter of the gasket and a second diameter of the gasket, wherein the first diameter and the second diameter differ by between about 0.5 mm and about 5 mm.] and wherein one or both of the peripheral side surface that is in contact with an inner surface of the syringe barrel and a surface of the gasket that is in contact with the liquid is laminated with polyethylene fluoride resin.

3. (twice amended) The gasket according to claim 1, wherein [one or both of the peripheral side surface that is in contact with an inner surface of the syringe barrel and a bottom surface that is in contact with the liquid is laminated with polyethylene fluoride resin] the tapered slant is defined by a first diameter extending to the peripheral side surface that is in contact with an inner surface of the syringe barrel, and a second diameter of a peripheral side surface of the gasket that is not in contact with the inner surface of the syringe barrel, wherein the first diameter and the second diameter differ by between about 0.5 mm and about 5 mm.

6. (amended) The gasket according to claim 1, wherein the gasket has a diameter between peripheral side surfaces that are in contact with the inner surface of the syringe barrel of between about 30 mm and about 35 mm.

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8. (amended) The gasket according to claim 3 [1], wherein the first diameter and the second diameter differ by between about 1 mm and about 3 mm.

APPENDIX B

NEW CLAIMS

9. A gasket for a pre-filled syringe into which liquid is charged, wherein a peripheral side surface of the gasket that is in contact with an inner surface of the syringe barrel is provided with a restriction, and wherein a periphery of a bottom surface of the gasket that is not in contact with the liquid is formed into a first tapered slant, and a second tapered slant is formed between the peripheral side surface of the gasket that is in contact with an inner surface of the syringe barrel and the restriction.

10. The gasket according to claims 1 or 11, wherein the gasket tightly closes the liquid charged into the syringe, and wherein the liquid is a contrast medium.